Data Management of Standard Test and Assessment O-NET from Students Grades 6 and 9 during the Year 2010 and 2013 in Chachoengsao Province, Thailand

Nuengruthai Mekwathat, Rajabhat Rajanagarindra University, Thailand

Abstract

This study was aimed to analyze the differences of standard test and results of the 8 subjects' test from the Ordinary National Educational Test (O-NET) that took place during 2010 and 2013 of the students Grades 6 and 9 in Chachoengsao province, Thailand. The samples were taken from 81 schools under the Educational Service Area (ESA). It was shown that the standard test for Thai and English languages yielded lowest scores, while the O-NET score for English language was at the lowest level in both years for grade 6 students. The subject that yielded a different standard test from O-NET was English language, which gave a similar result in both years. The scores in both subject of Health and Physical Education and Thai language, were at balanced levels. Students of grade 9 had the lowest scores for standard test in Mathematics, while the O-NET score was at the lowest level in both years. The comparison between scores of standard test and O-NET showed that the subject of Science and English language yielded the highest difference, whereas the most balanced score of both years was in the subject of Health and Physical Education. The lower or equivalent scores were mostly found in English Language. In regarding to the Radar Chart, the lowest score that needed for an improvement was the English language for both grades 6 and 9.

Keywords: Standard test, Ordinary National Educational Test (O-NET).

iafor

The International Academic Forum
www.iafor.org

Introduction

In 2011, The Ministry of Education announced The Basic Education Core curriculum as the national curriculum which was aimed at providing standard of learning and guidance of developing learners to be moral, matured, and able to compete in global forum. The basic education core curriculum also allowed opportunities for further amplification to the regions and schools to play a role in developing the curriculum accordingly to National Education Act of 1999. However, many researches revealed that the quality of students concerning with an acquisition of essential knowledge, skills, capacity and desirable characteristics and attributes were quite disconcerting. Also, there were problems and issues of confusion and uncertainty included the Curriculum's its documents, application process and results.

Consequently, in 2008, The Basic Education Core curriculum was developed accordingly to the data and information provided in the Tenth National Economic and Social Development Plan, by focusing on preparing Thai children and youths to be ready for the 21st century. Also, learning standards and relevant indicators were developed to be clearer (Office of the Basic Education Commission, 2010). Besides, learning measurement was an important mechanism for following an achievement of using The Basic Education Core curriculum. An independent entity under the act of test production and student's learning measurement, National Institute of Educational Testing Service (NIETS), was set up to continually promulgate those actions to public and government sector. NIETS is responsible in conducting the standard tests of every subject for all Thai students. Having been called O-NET or Ordinary National Education Test, it is divided into 4 educational levels (grade 3, grade 6, grade 9 and grade 12). That was to say, Thailand educational structure mentioned earlier was specified to be outstanding by words; however, it could not be followed by actions. As a result, an educational failure is obviously seen in Thailand nowadays.

There were some observations about the failure of Thai education system, mentioning that NIETS took part in pushing students out of the classrooms to the tutorial classes outside, due to the content of examination questions which are beyond the level of students. On the other hand,National Institute of Educational Testing Service or NIETS generally publishes those results and reports them to the minister and government by emphasizing averaged results of the students in the whole country and in every subject by claiming that all of them are in a low level. As a result, parents, teachers, students and stakeholders in the society might realize and reflect this as learner's failure (learners are immature, unintelligent, lazy, addicted to games etc.), teacher's failure (teachers are unprofessional, have limited time, receieve low salary, work unefficiency etc.), school's failure, school director's failure or even Educational Service Office director's failure. One thing which aggravates an educational system is that the implication of the result of this test as the criteria in budget support leading to the corruption in an admission system as well as giving the answers to students during the test for an increasing average. These actions are examples of an immorality performed by adults. Therefore, if those adults in the country have set the question "why Thai youths nowadays lack of virtue and morality?", how many of them would turn to ask back if there is any adult "NOT" lacking of it?

For analyzing those various problems in Thai educational system, it is a must that one who sees the problems should sees the way to solve them too. That was to say, the

procedure for student's measurement-test-evaluation were correctly preceded under standard of making core standard test. Nevertheless, the test results must be analyzed for a development not for an announcement (as a revilement), then used as a decision in budgeting which was not counted as a development. Therefore, this research aims to apply an analysis of the differences between data Management of Standard Test and Assessment O-NET from Students Grades 6 and 9 during the year 2010 and 2013 in Chachoengsao Province, Thailand; categorizing by subjects and school size, to find out the resolution by managing information received from the measurement, in order to propose the students' weaknesses to Educational Service area Offices, schools and teachers. Therefore, student's learning quality would be improved accordingly to guidance of testing accuracy.

Objectives

1) To study standard test and results of the 8 subjects' test from the Ordinary National Educational Test (O-NET) that took place during 2010 and 2013 of the students Grades 6 and 9inChachoengsaoprovince,Thailand; by categorizing by subjects and school size.

2) To analyze the differences of standard test and results of the 8 subjects' test from the Ordinary National Educational Test (O-NET) that took place during 2010 and 2013 of the students Grades 6 and 9inChachoengsaoprovince,Thailand; by categorizing by subjects and school size.

3) To investigate the weakness and the issues this must be developed in the school level.

Method

1) Asked for the results of standard test and results of ONET of Students Grades 6 and 9 during the Year 2010 and 2013 in Chachoengsao Province, Thailand, and data management process from Educational Service Area office and schools.

2) Classified those information by subjects and school sizes, then analyzed data management of each school and compare for finding Best Practice, dividing basely on grade, year of given data and school size.

3) Investigated students' abilities in each subject in order to sort out those whose scores were lower or equal 50% to find the level of weakness.

4) Investigate the weaknesses and the issues which must be developed in the school level.

Result

The results were as follow;

Table 1: total number of schools and percentage classifying by the school size

School size	Grade 6		Grade9	
	The total number of schools	Percentage	The total number of schools	Percentage
Small	25	32.90	2	6.90
Medium	44	57.90	21	72.41
Large	4	5.26	5	17.24
Extra large	3	3.94	1	3.45
total	76	100.00	29	100.00

The analysis of the differences about standard test and results of ONET from Students Grades 6 and 9 during the Year 2010 and 2013 in Chachoengsao Province, classifying by subjects and school sizes.
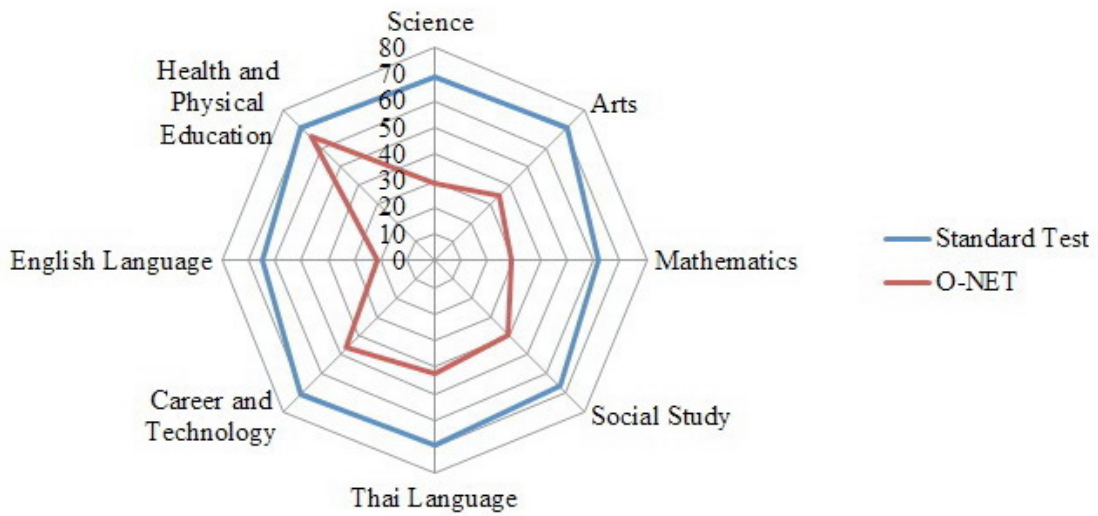
Picture 1: the differences about standard test and results of ONET from Students Grade 6 during the Year 2010 in Chachoengsao Province, classifying by subjects and school sizes.
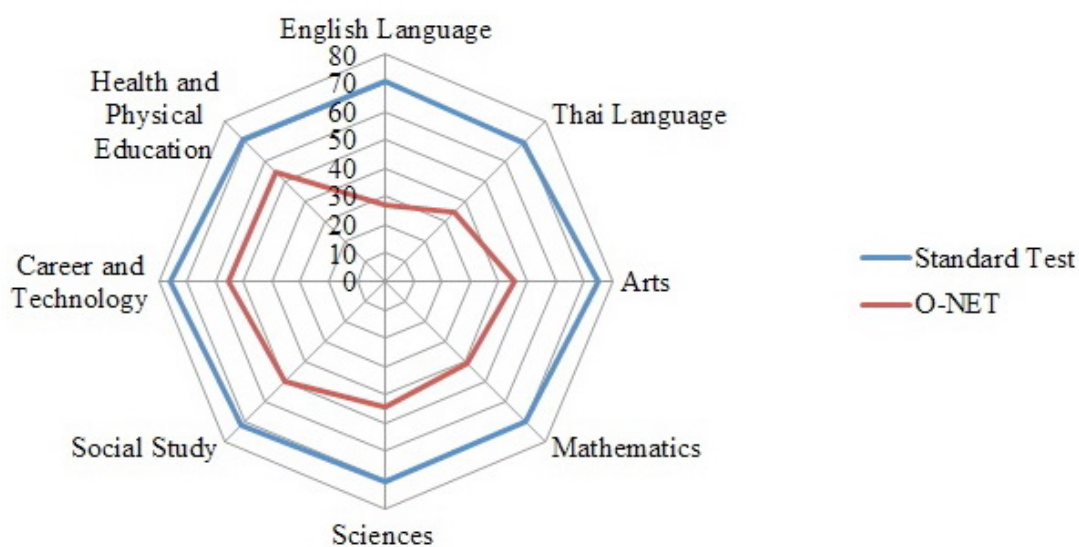
Picture 2: the differences about standard test and results of ONET from Students Grade 6 during the Year 2013 in Chachoengsao Province, classifying by subjects and school sizes.
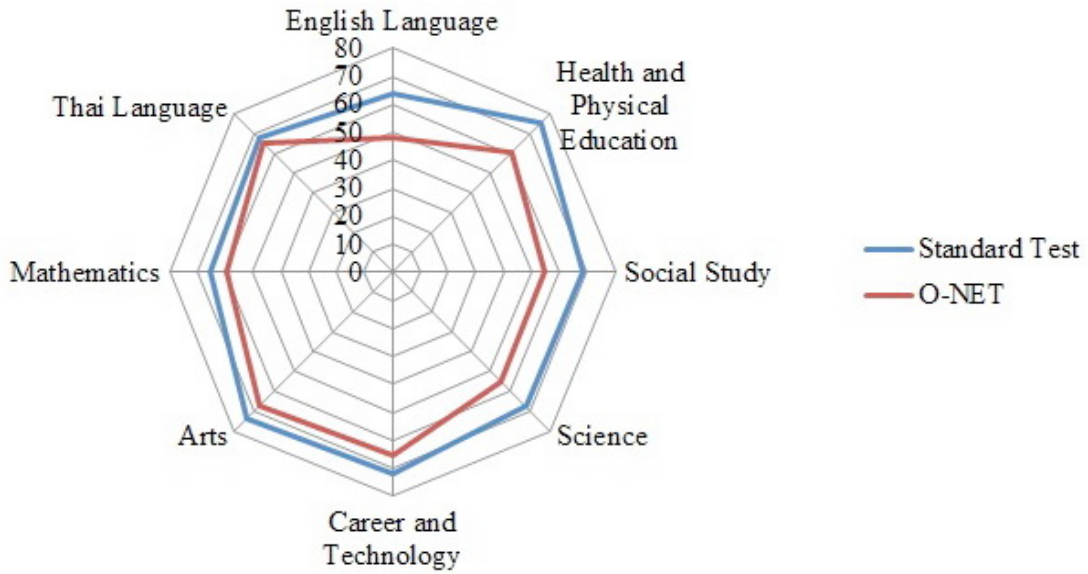
Picture 3 The differences about standard test and results of ONET from Students Grade 9 during the Year 2010 in Chachoengsao Province, classifying by subjects and school sizes.

Picture 4: the differences about standard test and results of O-NET from Students Grade 9 during the year 2013 in Chachoengsao Province, classifying by subjects and school sizes
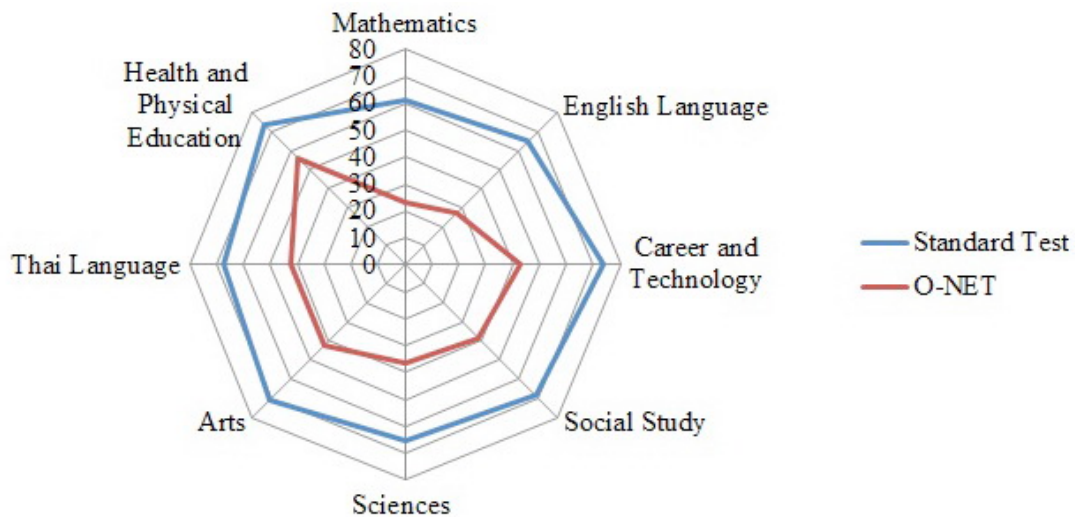
Table 2: best Practice of standard test and results of the 8 subjects' test from the Ordinary National Educational Test (O-NET) classifying by grades, years of given data and school sizes

Data and school size

Order	Grade 6/2010	Grade 6/2013	Grade 9/2010	Grade 9/2013
small	Health and Physical Education	Health and Physical Education	Sciences	Career and Technology
medium	Health and Physical Education	Health and Physical Education	Health and Physical Education	Health and Physical Education
large	Health and Physical Education	Health and Physical Education	Career and Technology	Career and Technology
extra large	Arts	Health and Physical Education	Thai Language	Thai Language

Best Practice standard test from Students Grades 6 was the subject of Health and Physical Education and grade9's were the subjects of Career and Technology, Health and Physical Education and Thai Language respectively.

Best Practice of O-NET results from Students Grades 6 and 9 were shown in Table 3.

Table 3: best Practice of O-NET results classifying by grades, years of given data and school sizes

Order	Grade 6/2010	Grade 6/2013	Grade 9/2010	Grade 9/2013
Small	Health and Physical Education	Health and Physical Education	Arts	Health and Physical Education
medium	Career and Technology	Health and Physical Education	Career and Technology	Career and Technology
large	Health and Physical Education	Health and Physical Education	Health and Physical Education	Health and Physical Education
Extra large	Health and Physical Education	Health and Physical Education	Career and Technology	Health and Physical Education

Best Practice of ONET results from Students Grades 6 was the subject of Health and Physical Education and grade9's were the subjects of Career and Technology and Health and Physical Education.

Table 4: percentage of grades 6 and 9 students' abilities in each subject during year 2010 and 2013, analyzing from the scores which lower or equal 50%

subject	score	Grade 6				Grade 9			
		year 2010		year 2013		year 2010		year 2013	
		Standard Test	O-NET	Standard Test	O-NET	Standard Test	O-NET	Standard Test	O-NET
Thai Language	26–50	5.84	53.5	10.46	56.72	2.25	58.15	7.17	61.16
	1–25	7.53	30.64	1.63	6.80	0.09	12.10	0.74	5.79
	0	0	0.21	0	0	2.16	0.09	0.04	0
	50*	0.83	1.76	3.19	4.36	1.05	4.97	3.40	4.19
Mathematics	26–50	4.27	50.48	7.65	46.95	11.65	40.03	15.84	37.97
	1–25	1.51	21.6	4.26	27.22	0.48	51.69	1.34	61.27
	0	0	0.27	0.19	0.38	0.49	0.15	0	0.13
	50*	5.66	2.10	2.21	7.36	9.91	0.97	9.43	0.05
Science	26–50	4.6	48.47	10.65	51.70	2.25	40.17	11.27	79.04
	1–25	1.35	14.87	2.07	15.89	0.34	49.56	0.21	10.96
	0	0.02	0.33	0.04	0	0.29	0.93	0	1.03
	50*	0.95	2.77	1.18	1.92	1.83	2.24	9.26	1.34
Social study	26–50	3.28	42.78	9.09	71.79	5.19	46.74	4.81	78.48
	1–25	0.40	9.79	1.97	14.78	0.93	25.34	2.21	8.29
	0	0.09	0.10	0.14	0	0.78	0.02	0.04	0.80
	50*	0.50	0	0.47	3.63	2.31	5.24	2.37	3.06
English language	26–50	3.99	21.56	11.75	46.61	4.74	21.29	8.11	60.53
	1–25	1.86	45.84	4.16	26.12	0.61	62.58	0.47	38.42
	0	0.54	14.90	0.04	0.03	0.34	7.52	0.04	0.05

	50*	5.77	2.99	5.16	1.87	3.81	1.98	6.32	0.23
Arts	26–50	4.96	45.03	5.87	50.82	2.65	50.81	9.89	77.87
	1–25	1.04	13.85	1.67	13.56	0.32	23.76	0.04	2.79
	0	0.19	3.89	0.04	0.37	0.26	7.23	0.80	0
	50*	1.65	0.04	1.44	10.59	1.24	0.46	5.66	3.72
Health and Physical Education	26–50	3.29	39.65	4.49	22.84	3.50	16.17	0.98	23.99
	1–25	0.44	5.51	0.51	4.74	0.12	7.85	0.11	1.89
	0	0	0.19	0.14	0.03	0.98	0.10	0.80	0.04
	50*	1.18	14.79	0.39	0.04	1.34	5.27	0.64	7.41
Career and Technology	26–50	3.00	35.71	7.06	36.51	1.74	46.90	2.11	62.79
	1–25	0.66	5.57	4.04	16.22	0.09	17.91	0.04	8.50
	0	0.21	0.87	0.34	0.08	0.19	3.36	0.72	0.85
	50*	1.56	19.93	1.96	0.19	1.51	10.57	1.82	3.95

Grades 6 and 9 students' abilities in each subject and school size during year 2010 and 2013, analyzing from the scores which lower or equal 50 were mostly high in English Language in both standard test and results of the 8 subjects' test from the Ordinary National Educational Test (O-NET).

Discussion

This study was aimed to analyze the differences of standard test and results of the 8 subjects' test from the Ordinary National Educational Test (O-NET), that took place during 2010 and 2013 of the students Grades 6 and 9inChachoengsao province, classifying from subjects and school sizes. Also, it was aimed to investigate the weakness and the issues which must be developed in the school level. The samples were taken from schools under the Educational Service Area (ESA) by using the simple random sampling technique to select the voluntary participants by using 25% of sample proportions. The tools used for collecting data were the score-record form and the structured interview. The results were as follow;

1) For students Grade 6 in 2010 at Chachoengsao province, the highest scores for standard test was the subject of Career and Technology, while the lowest scores was the subject of Thai language. In term of ONET results analysis, the highest score was also the subject of Career and Technology, while the lowest scores was the subject of English language. Moreover, the subject which the scores for standard test was the most different from ONET scores was English, while the subject of Health and Physical Education; in the other hand, was the highest balanced. In 2013; the highest score for both standard test and ONET was the subject of arts, while the lowest scores was the subject of English language. As for the differences of standard test and the results from O-NET, the subject of English was the most different, while the subject of Thai conversely had the highest balanced. Additionally, students Grade 9 in 2010 at Chachoengsao province had the highest scores for standard test in the subject of arts, yet had the lowest scores in the subject of Mathematics. Concerning with ONET scores, the subject of Health and Physical Education's score was the highest, whereas, English's score was the lowest. Moreover, by comparing the scores of standard test and the results from O-NET, the subject of Science was the most different, in contrast; the most balanced score was the subject of Health and Physical Education's. Besides that, in 2013, the highest score for standard test was the subject of Career and

Technology, while the lowest scores was the subject of English. As for ONET scores, the students had the highest score in the subject of Health and Physical Education. However, English's score was the lowest. Comparing the scores from both standard test and O-NET, the subjects which had the highest difference was English, while subject of Health and Physical Education's had the highest balance

2) Considering from the Radar Chart, the weaknesses and the must-developed points in the school level were found that the English subject of both grade 6 and grade 9 should be improved.

The weaknesses and the must-developed points in the school level, found in this study were; the variety of the measurement and evaluation such as the strictness and lenience of scoring, the process of score collecting in each school; that is to say, most schools collected those raw scores on paper and collected the averaged scores on files in order to present to Educational Service Office, an insufficiency of contents taught in class, the lack of knowledge and understanding about the measurement and evaluation process in class such as a learning achievement test design, the teacher's, student's, and executive's consciousness about an importance of testing process, and the sincerity in applying results for student's quality development. Therefore, the result of this research matched up with the study of Husaprab (2004) claiming that 1) built up the consciousness of an importance of ONET to all teachers and students 2) pushed forward teachers to apply the results in developing various types of learning management 3) identified the vision, mission and goal emphasizing competencies of learners which could clearly reflect the concrete success 4) produce developing plan or enhancing learning achievement plan in order to be a guideline for operating school's projects/activities 5) supported and promoted research operation and enhanced learning achievement such as the research procedure and development of supervision management, Research learning for studying the problems of testing as well as investigating the guidance for applying the results in enhancing learning achievement. *For the management,* there should be the meeting to inform information and report the achievement results of the previous year to teachers, the monitoring process to follow up the results of each subject, an evaluation of the test under the indicator of student development, the report of information and test result to students including educational guidance which could help the students to know their own abilities and be prepared to study in higher level, the tutorial by inviting famous tutors or teachers in school for reviewing contents in order to prepare students for the test. Concerning with *teacher development*, the teachers should be supported to do research for solving problems and developing learners' competencies. That is to say, in some schools, an advancement of learning achievement is especially emphasized in order to urge teachers to improve their teaching method. At the same time, some schools; there is the teacher coaching which sporadically evaluates the teacher's teaching methods in order to control them to be along with school standard. Moreover, in some schools, teachers are motivated by honorary award in case that their students receive high or full score. As a result, teachers would be proud and inspired to continually perform their duties.

Acknowlededement T

References

Hussaprab, P. (2004). the development of educational testing strategies for using into the students' quality development. The *National Institute of* Educational Testing Service (*Public Organization*)).

Office of the Basic Education Commission. (2010).the guidance of applying student development focus to practice.Bangkok: *Office of the Basic Education Commission*

The *National Institute of* Educational Testing Service (*Public Organization*) NIETS. (2004). *Institution's information.* Retrieved March 15 2014, from http://www.niets.or.th

Contact email: fasai.ann@hotmail.com